

The highs of caffeine consumption

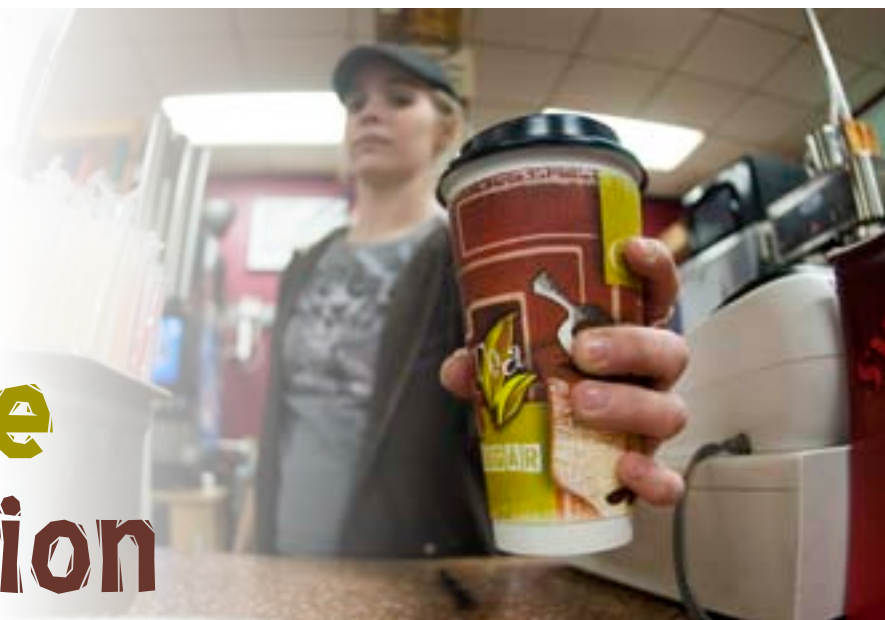


Photo by Sgt. David Bruce

By Army Sgt. David Bruce
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It is a morning ritual played out across North America. The greeting of sunrise is marked by the creation of a liquid infusion to help clear the cobwebs, to jump-start mental alacrity. It is the best part of waking up, or so we have been conditioned to believe.

Coffee is perhaps the most pervasive of caffeinated concoctions; however, it is only one in a plethora of beverages promising a quick boost.

According to the Food and Drug Administration, 80 percent of American adults consume caffeinated beverages. So with most of the country, to include the National Guard, operating on a caffeinated buzz, what exactly is caffeine and what are the effects and consequences of this seemingly omnipresent drug of choice?

"Caffeine is a naturally occurring substance in plant alkaloids, such as coffee, tea and chocolate," said Dr. Daymon Evans, a physician at the Camp Atterbury Troop Medical Clinic in Indiana.

Evans said caffeine is a stimulant that simulates the effect of adrenaline in the human central nervous system. As a result, mental alertness is increased

and physical fatigue is reduced. Caffeine also acts as an appetite suppressant.

Like any drug, caffeine has its share of side effects. It makes insomnia worse and causes increases in gastric acid, which exacerbates ulcers and gastro-esophageal reflux disease, said Evans.

"At high doses, caffeine causes anxiety, jitteriness and a loss of fine motor control. It raises blood pressure and pulse rate—artificially causing the heart to work harder and thus putting more pressure on blood vessels," said Evans.

Caffeine also acts like a diuretic, which causes frequent urination. Without sufficient intake of liquids, dehydration may occur.

Of course, we are either oblivious to or care little for the side effects associated with too

much caffeine.

In a military training environment, policies regarding caffeinated beverages vary. In certain service schools, the use of them is curtailed – if not banned outright.

Warrant Officer Jason Compton, Warrant Officer Candidate School enrollment manager at the Indiana Regional Training Institute at Camp Atterbury, said that caffeine was a privilege for students.

"During phases one and two, the warrant officer candidates are not allowed anything with caffeine. At the end of phase three, they can have coffee in the morning, if their senior [Train, Assess, Counsel] officer allows," said Compton. "W-O-C-S is a high stress, physically demanding course. The proponent branch school at Fort Rucker, Ala. dictates the no caffeine policy."

Limiting caffeinated beverages leads to increased water consumption and environmental adaptation for the students, he added. While caffeine can give you a boost of energy, it is unsustainable with the physical demands of the course such as sleep deprivation, increased stress and spontaneous physical training sessions.

"We get mild complaints about the restriction, but Soldiers adapt well to no caffeine," said Compton.

While coffee is the most commonly consumed caffeinated beverage, energy drinks have exploded in popularity. Display cases at military post exchanges or any convenience store offer a dizzying array of choices of beverages to attain energy levels rivaling a 7-year-old with attention deficit disorder.

Pfc. Dale Amidon of Troop B 1-172 Cavalry (Mountain) said that energy drinks are his choice of pick-up.

"In the field, coffee is a luxury," he said. "It's easier to take energy drinks to the field than to try brewing coffee out there."

Whether by coffee, tea or energy drink, Soldiers will continue to consume caffeinated beverages to keep their energy levels up regardless of the inevitable crash. And there will be a crash. Caffeine is no substitute for diet, exercise and rest, warrior or not.

Too much caffeine?

Most experts say adults should consume no more than 300 milligrams a day.

- Generic-brewed coffee (8 oz) = 95 - 200 mg
- Shot of espresso = 58 - 75 mg
- Energy drink (8.3 oz) = 76 mg
- Energy drink (Lg.) = up to 160 mg
- Soft drinks (12 oz) = 0 - 71 mg

The amount of caffeine in coffee varies widely due to the roasting of the beans. Darker roasts tend to have less caffeine than lighter roasts.

-The Mayo Clinic

Always Ready, Always There,

Always Healthy

American Heart Association features Army Guard on work site wellness panel

Contributed by ARNG Decade of Health Team

Recent studies show that the greater Washington region has one of the highest levels of adult obesity, heart disease and stroke in the nation. It also has one of the highest rates of uncontrolled hypertension in women.

For individuals, this translates into an increased risk of heart attack and stroke. For the business community, this can mean a steep incline in health-care premiums, lowered productivity and increased absenteeism. Given the continuing economic pressures that companies are facing, wellness has a proven impact on improving the bottom line.

Executive leaders from over 30 major regional and international companies, including Maj. Gen. Deborah Wheeling, deputy surgeon general of the Army Guard, were featured panelists at the Greater D.C. Area Affiliate's annual American Heart Association's Start! Executive Leadership Breakfast May 3.

The panel addressed their strategies and successes in incorporating wellness programs, including AHA's walking program Start! into corporate culture.

Wheeling credited the benefits of using online media to reach ARNG Soldiers and Families with the ARNG surgeon's wellness program, Decade of Health. This program annually targets a specific area to boost medical readiness and boost Family awareness ranging from oral health to resilience. This year's campaign, Ready & Resilient II, "Strength from Within" focuses primarily on providing resources



Maj. Gen. Deborah Wheeling, deputy surgeon general of the Army Guard

and tools that build body, mind and spirit and embraces stroke prevention as part of an alliance forged with the AHA/ASA in 2007.

"The goal of this program is to promote health literacy, healthy lifestyles and

also enhance resiliency in our active members as well as their families," said Wheeling. "Our alliance with the American Heart Association is designed to leverage the strengths of both organizations. AHA/ASA materials and programs are based on scientific research and provide information that is accurate, respected and helpful. In return, the Army National Guard offers to the AHA/ASA a unique way to get their messaging out to all Guard Soldiers and potentially to over 9 million other members of the Department of Defense community. This partnership has significantly increased our ability to help to promote health and awareness amongst the Army National Guard and has helped us to achieve our goal of, "Always Ready, Always There, Always Healthy."



Walk this way

Research has shown that the benefits of walking and physical activity for only 30 minutes a day include:

- Reduced risk of coronary heart disease and stroke
- Lower blood pressure
- Lower high cholesterol and improved blood lipid profile
- Reduced body fat and controlled body weight
- Enhanced mental well-being
- Increased bone density, hence helping to prevent osteoporosis
- Reduced risk of cancer
- Reduced risk of non-insulin dependent diabetes

The AHA's Start! program is built on a simple premise – walk more, eat well and you will live longer. Start! focuses on walking as an activity because it's accessible, free and has the lowest dropout rate of any type of exercise.